# Montana Height Modernization Strategic Plan Meeting Report

Conducted November 30, 2006 9:00 AM to 12:10 PM at Montana Department of Transportation (MDT) headquarters, Helena, Montana. Several attended via phone-out conferencing.

#### **Participants**

Dave Davis, MDT
Todd Ferris, Inland GPS
Stu Kirkpatrick, DOA
Bryce Larsen, MDT
Steve Niday, Missoula County
Gerald Pavlick, Morrison Maierle, Inc.
Curt Smith, NGS
Dick Smith, Smith Surveying
Greg Thurston, City of Kalispell
R.J. Zimmer, DJ&A

# **General Agenda**

- 1. Committee Updates
  - A. Montana Height Modernization Program Plan Draft
  - B. Montana Height Modernization Pilot Project Proposal
  - C. Montana Height Modernization Marketing Plan Draft
- 2. MDT Montana Height Modernization Web Site
- 3. Committee Direction and Strategy
- 4. Upcoming Events and Target Dates
- 5. Next Meeting

#### **Reports**

Very good progress was made by each of the committees in developing the draft plans and demonstration project. Updated plans will be posted on the MDT Web site for Montana Height Modernization at: <a href="http://www.mdt.mt.gov/mdt/heightmod.shtml">http://www.mdt.mt.gov/mdt/heightmod.shtml</a>. This link is now listed as a "Previously Featured Link" listed under "More" from the MDT home page.

#### 1. Committee Updates

# **A. Montana Height Modernization Program Plan – Draft** (R.J. Zimmer reporting)

The Montana Height Modernization Program Plan, which at first draft closely resembles the Arizona Height Modernization Briefing Document available at: <a href="http://agic.az.gov/hm/">http://agic.az.gov/hm/</a>, is a very good first step towards addressing a planned strategy for the Montana Height Modernization Program (MT-HMP). The plan includes a detailed outline of the proposed action plan with associated costs. Once estimates of requested funds are finalized, representative dollar amounts will be updated in the text of the main document. Savings identified through the pilot project

analysis will also provide updated dollar amounts in the main document in the form of potential savings.

It was noted that bulleted items and specific selling points in each plan, Program Plan, Outreach Plan, and Marketing Plan should be the same.

Time was spent describing each of the components of the Program Plan. Comments follow:

# Year 1 A. Geodetic Reference Center (GRC) at MDT

Department of Administration (DOA) will cooperate with MDT in managing the GRC. Existing BLM funds available through DOA may be used to help support effort of MDT in staffing position to oversee MT-HMP. A Licensed Surveyor staffed at MDT could oversee the MT HMP as well as review data submitted to the Montana Control Point database. The GRC would also coordinate and oversee the Mark Recovery Program.

Note that this GRC is intended to begin immediately and that funding would have to come from MDT until grant funding becomes available. I personally feel this is the most important step to realizing the MT-HMP. This show of commitment and cooperation, if the direction of funds from DOA to be used to staff a MT-HMP coordinator at MDT, could encourage support from state legislators.

### Year 1 B. Mark Recovery Program

We can begin today on this part of the Program. A concerted effort by surveyors could begin station recovery and reporting condition on the NGS Web site's Mark Recovery page. This could be administered regionally by MARLS Chapters. Further comments are described below under C. Committee Direction and Strategy.

# Year 1 C. Demonstration Project

It was discussed to not mention a specific location for a Demonstration Project but rather develop criteria by which an evaluation of potential projects can be prioritized. By the time the grants process is initiated we should have a better idea of a target Demonstration Project.

We need to identify the selection criteria for prioritizing projects. Such as:

Availability and condition of vertical control

High growth area

Possibly coordinate with D-FIRM projects/updates

Our Demonstration Project needs to stimulate buy-in from developers who will help promote MT-HMP as well as address interests and needs from smaller communities.

It was noted that a poll of local surveyors indicated that more bench marks on the ground would be of greater help than more CORS. I think this also speaks to the goals of the Demonstration Project and needs to be addressed to develop the amount of money requested for this and other projects.

#### **B.** Montana Height Modernization Pilot Project – Proposal (Steve Niday reporting)

We discussed the importance of a pilot project in Montana as there are numerous existing pilot projects from other states involved with Height Modernization. A project specific to Montana would provide that direct link to Montana conditions and issues.

Steve Niday and Todd Ferris detailed two possible projects in the Missoula area which have been previously surveyed with conventional GPS methodology. The same projects could be resurveyed with RTK methodology providing a cost comparison between the two methodologies. The two projects were the Milltown Dam site which covers approximately 10 square miles and a ground water monitoring project which covers approximately 250 square miles.

We decided that Steve and Todd could simulate a virtual reference network, a possible ultimate goal of height modernization, and resurvey the Milltown site using RTK methodology in one day as volunteers on a weekend possibly by the end of December. As Steve is has compiled time and costs associated with the previous conventional survey, a cost comparison with projected savings could be identified.

# C. Montana Height Modernization Marketing Plan – Draft (Dick Smith reporting)

Generate actual working list of potential contacts with connection to spatial interests. Stu mentioned he could provide a list of County Commissioners and Dick mentioned he could enlist the services of the MARLS Chapters to acquire other contacts. A letter describing the MT-HMP could be sent to these contacts to garner support. There would be a first proposal describing the HT-HMP and then efforts to encourage multiple, long term support. These response letters would become part of the overall Program Plan.

The first proposal needs to be written and mailed soon so responses could be used in the original Program Plan. Stu will write the first draft of the introductory letter hopefully illustrating the cost savings identified in the Pilot Project being resurveyed by Steve Niday and Todd Ferris.

The Marketing Plan is very well done as a first attempt and provides some good bullets and selling points which should be used in all our documents. The timing of some of the overall direction may need to be moved ahead to enlist support from the Governor in the near future.

Zim indicated he could create and maintain a descriptive list of acronyms which will help us understand some of the shortcuts used in our documents.

# **2. MDT Montana Height Modernization Web Site** (Dave Davis reporting)

Updated plans, as well as meeting minutes will be posted on the MDT Web site for Montana Height Modernization at: <a href="http://www.mdt.mt.gov/mdt/heightmod.shtml">http://www.mdt.mt.gov/mdt/heightmod.shtml</a>. Please note this link is now listed as a "Previously Featured Link" listed under "More" from the MDT home page.

# 3. Committee Direction and Strategy

# **A. MDT Hosting Executive Committee Meetings**

Once the phone-out conferencing issues were resolved, the meeting progressed very well and it was decided the MDT as host for future Executive Committee meetings would continue. Thanks to Dave Davis and MDT for hosting these meetings.

# **B.** Mark Recovery Program

Part of the Program Plan includes an analysis of all geodetic control, especially vertical, which resides in the NGS database. Funds have been identified in the Program Plan for Mark Recovery. It was also discussed that quite a bit of this effort could be addressed by surveyors in the state. Dick Smith noted he could discuss with the MARLS Board of Directors a potential effort by MARLS Chapters to perform the reconnaissance in their regions. A map of the MARLS Chapter regions can be found at the MARLS Web site at <a href="http://www.marls.com/page9.html">http://www.marls.com/page9.html</a>.

It was noted by the Committee a coordinated effort is required to minimize duplication. Surveyors should be encouraged to update a station's condition, recovered good or poor, or not recovered or destroyed, which can be easily updated on the NGS Web site for Mark Recovery Entry at <a href="http://www.ngs.noaa.gov/FORMS\_PROCESSING-cgi-bin/recvy\_entry\_www.prl">http://www.ngs.noaa.gov/FORMS\_PROCESSING-cgi-bin/recvy\_entry\_www.prl</a>. The station's PID is required before data entry is possible. Zim was going to look into providing a standardized methodology for mark recovery efforts to streamline and help coordinate the project.

As we speak, I am working with NGS headquarters to provide a shapefile with all horizontal and vertical control for the state of Montana.

# 4. Upcoming Events and Target Dates

Dick Smith to address MARLS Board of Directors meeting about mark recovery on December 6.

Stu will provide to the Executive Committee a draft one page Introductory Letter to make initial contact with identified stakeholders on December 11.

Stu will be attending a Congressional GIS Strategy meeting in Washington, D.C. in March and may take the opportunity to approach U.S. Legislators about MT-HMP.

Create an informational meeting about Real Time Networks that could be developed in Montana. Enlist the help and direction from Gavin Schrock, who manages the Washington Spatial Reference Network by inviting him to speak somewhere in the state. Todd Ferris will contact Gavin and help develop this meeting.

Updated Plans will be reviewed at the next Executive Committee on January 17, 2007.

"Final" Executive Summaries are due February 1, 2007.

# 5. Next Meeting

The next meeting of the Montana Height Modernization Executive Committee is scheduled for Wednesday, January 17, 2007 at MDT headquarters, Helena, Montana beginning at 9:00 AM.

There will be opportunity for call-out conferencing. Contact Dave Davis, <a href="mailto:dadavis@mt.gov">dadavis@mt.gov</a>, for particulars.

Respectfully submitted;

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